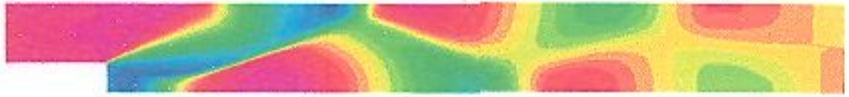
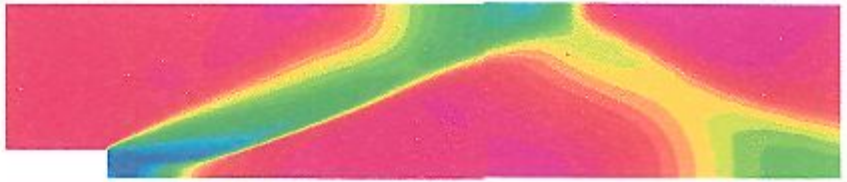
ER=2.0 (H/h=2.0)



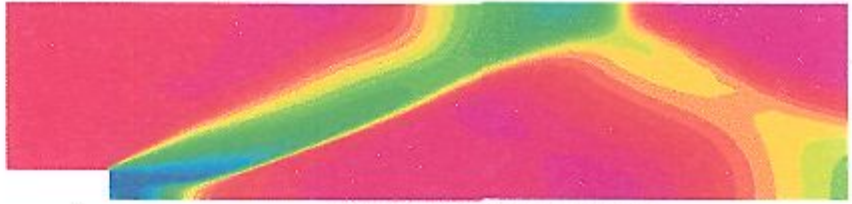
ER=1.5 (H/h=3.0)

ER=1.33 (H/h=4.0)

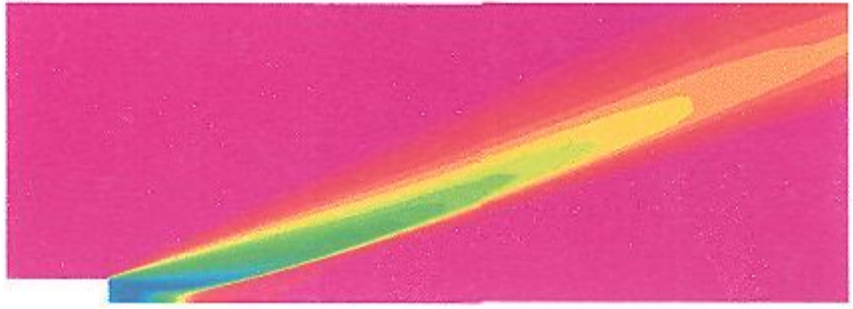
ER=1.25 (H/h=5.0)



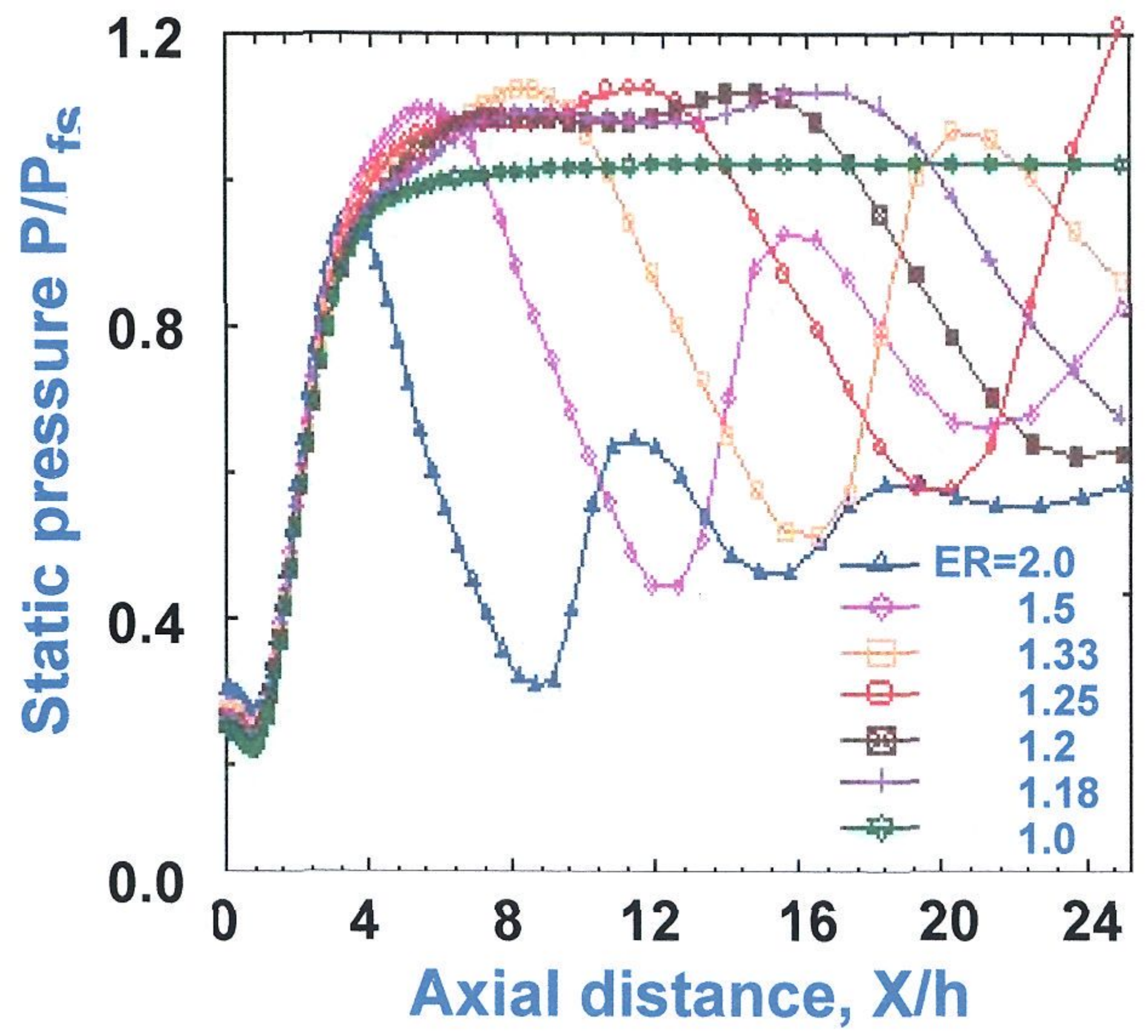
ER=1.2 (H/h=6.0)

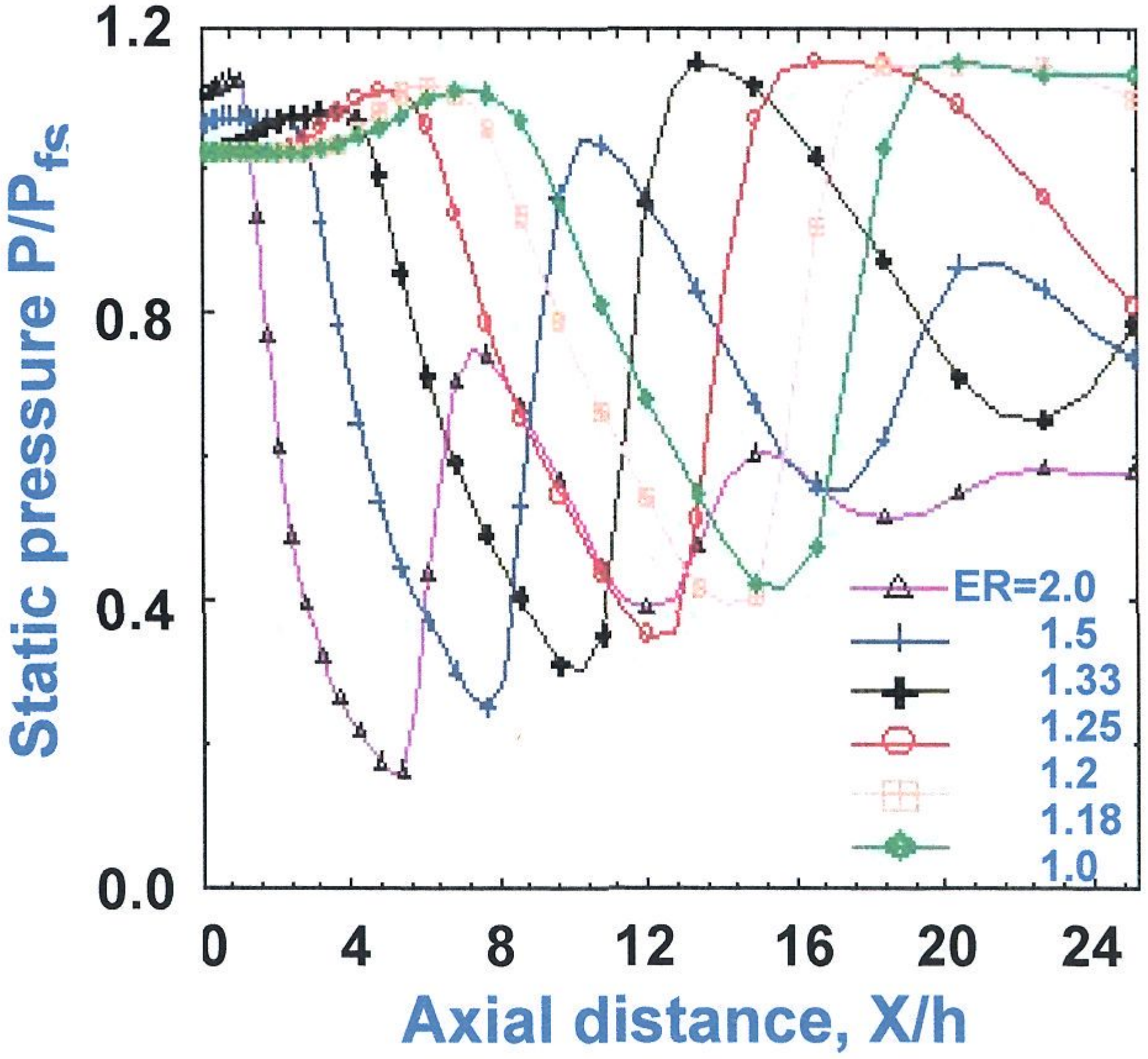


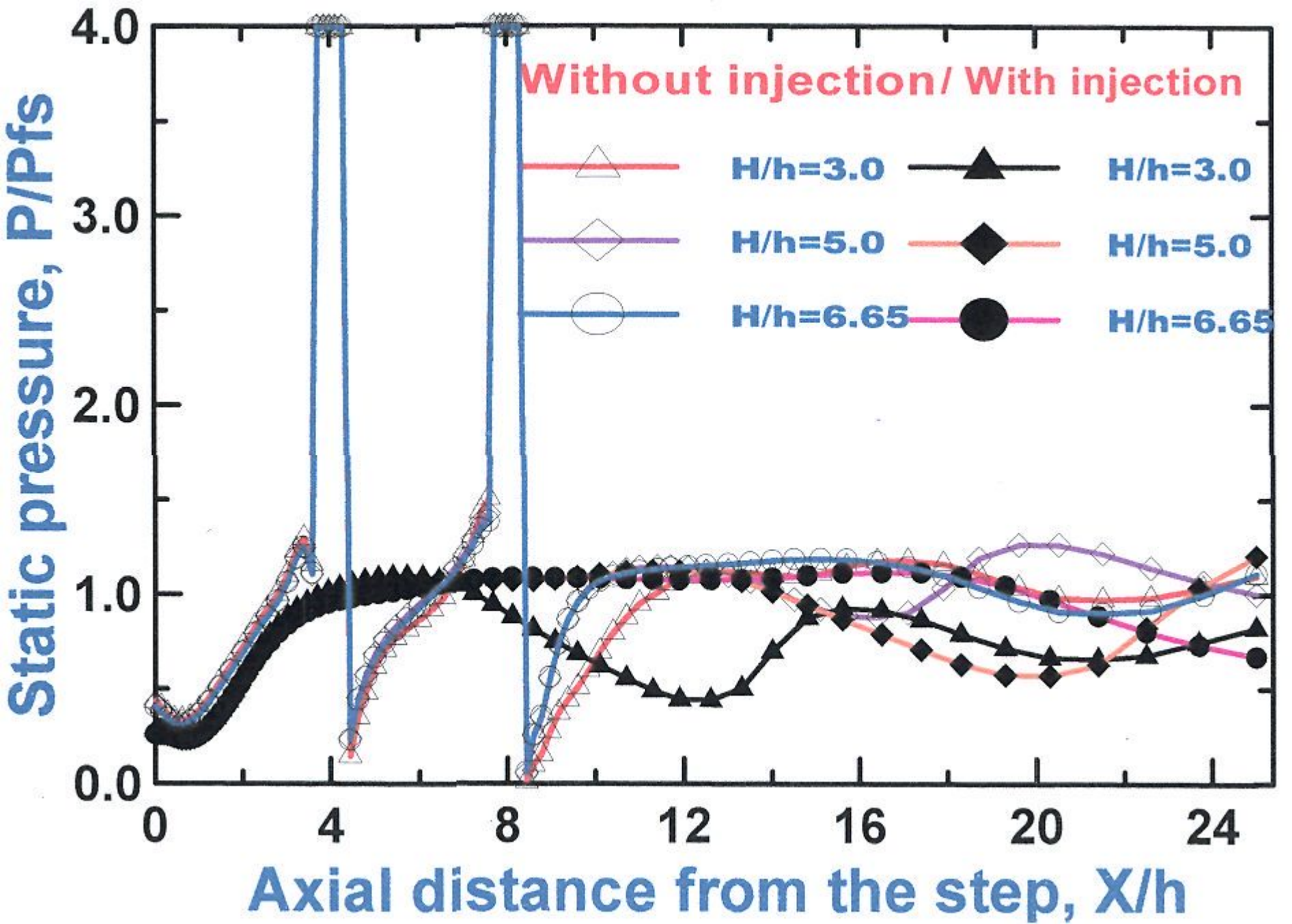
ER=1.177 (H/h=6.65)

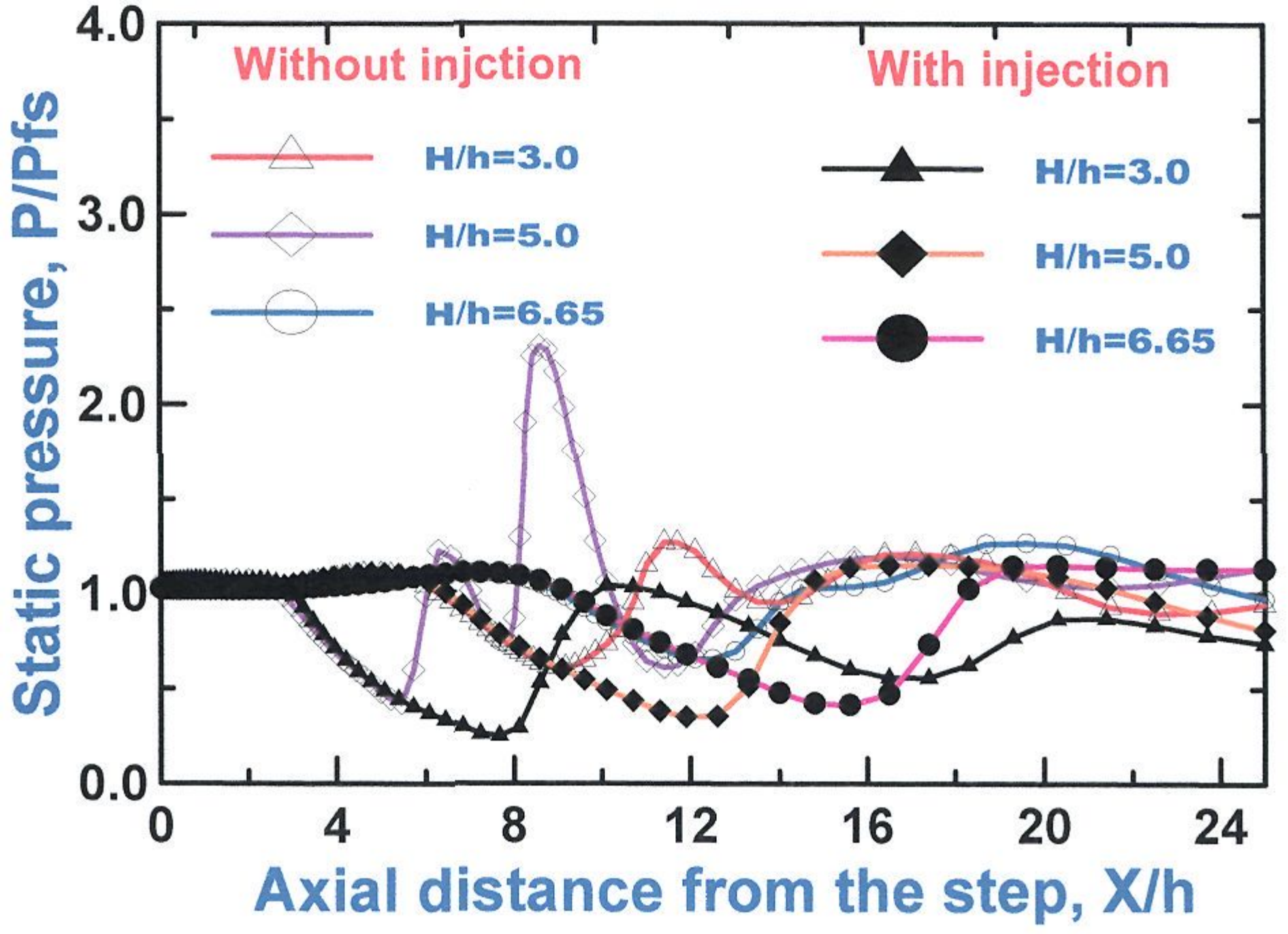


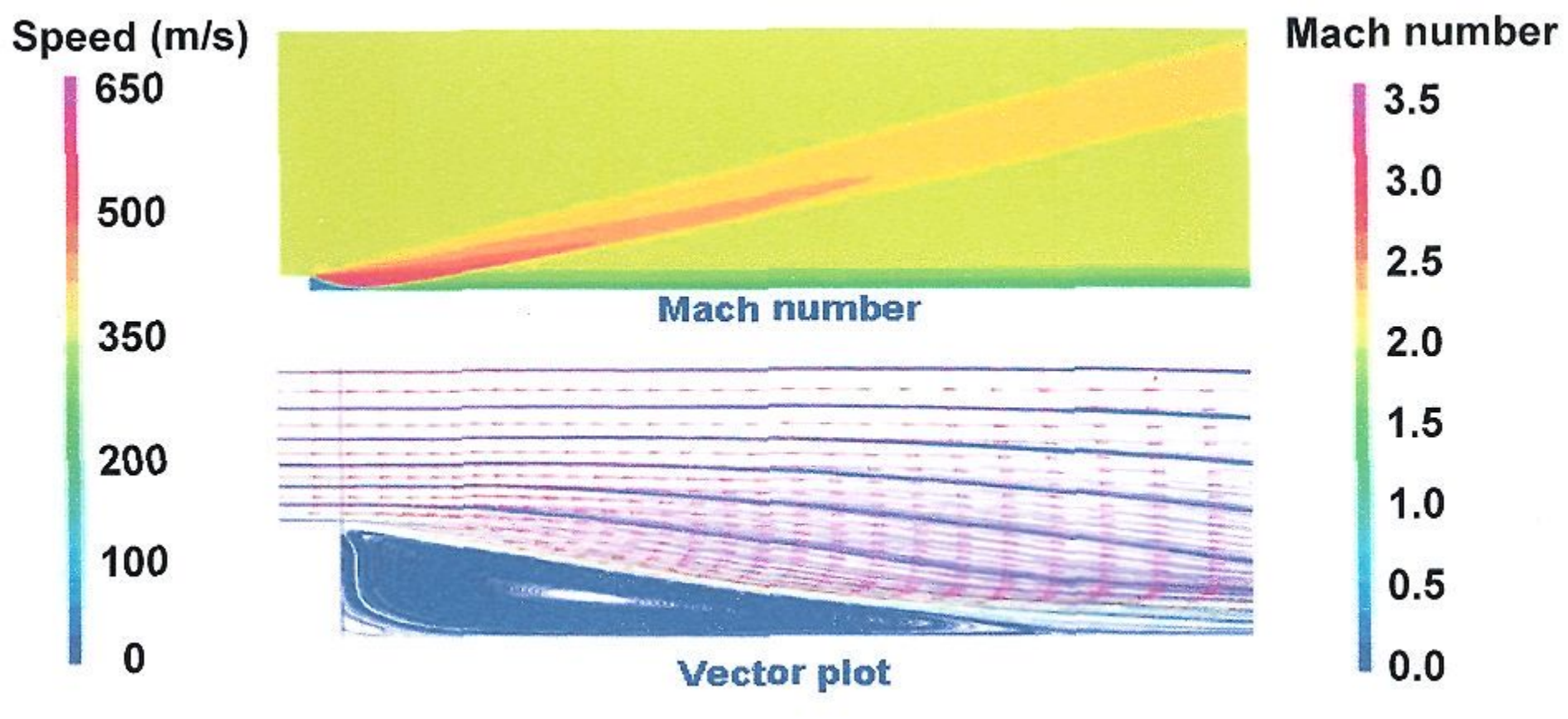
ER~1.0 (Unconfined)

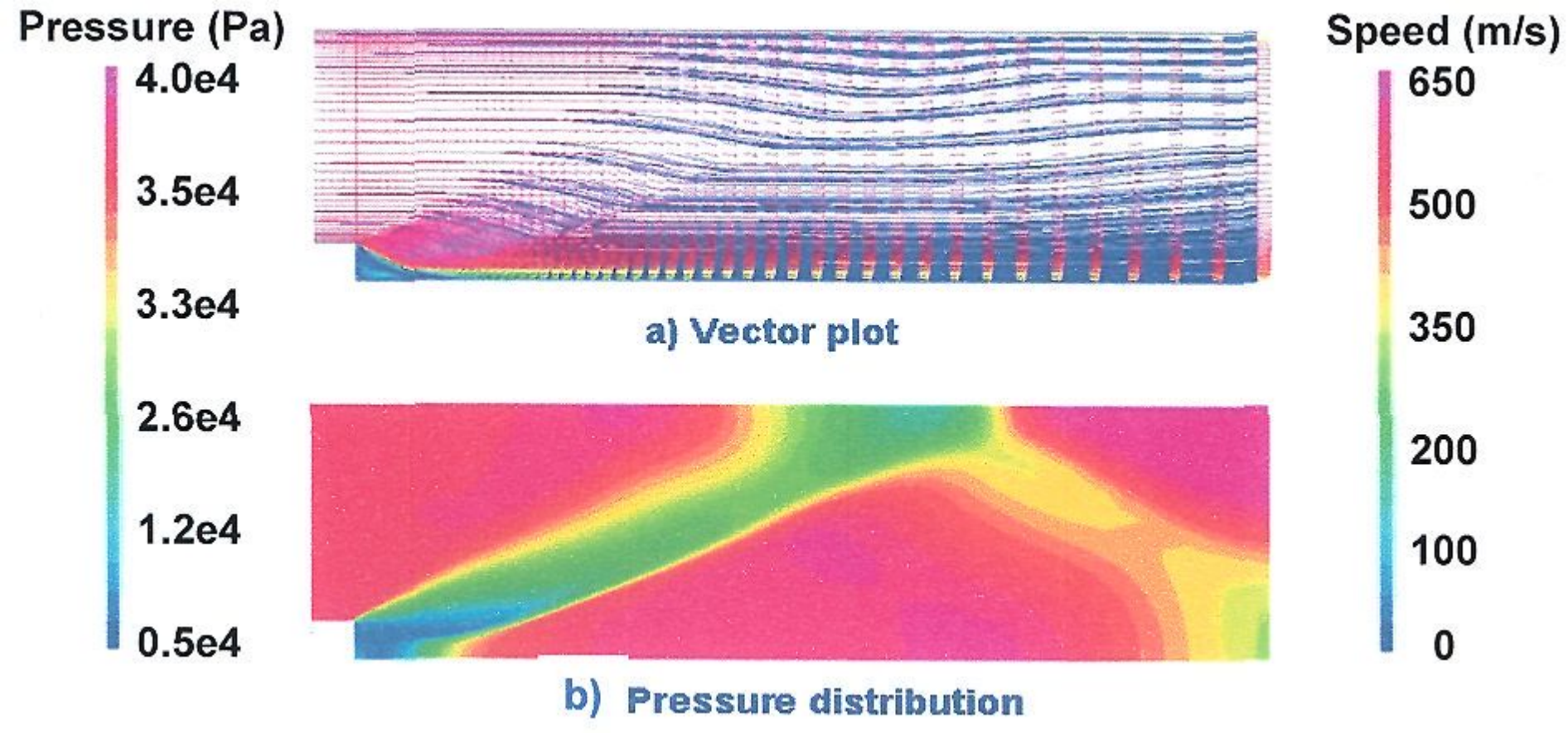

Static pressure P/P$_{fs}$
1.2
0.8
0.4
0.0
0
4
8
12
16
20
24
Axial distance, X/h
ER=2.0
1.5
1.33
1.25
1.2
1.18
1.0

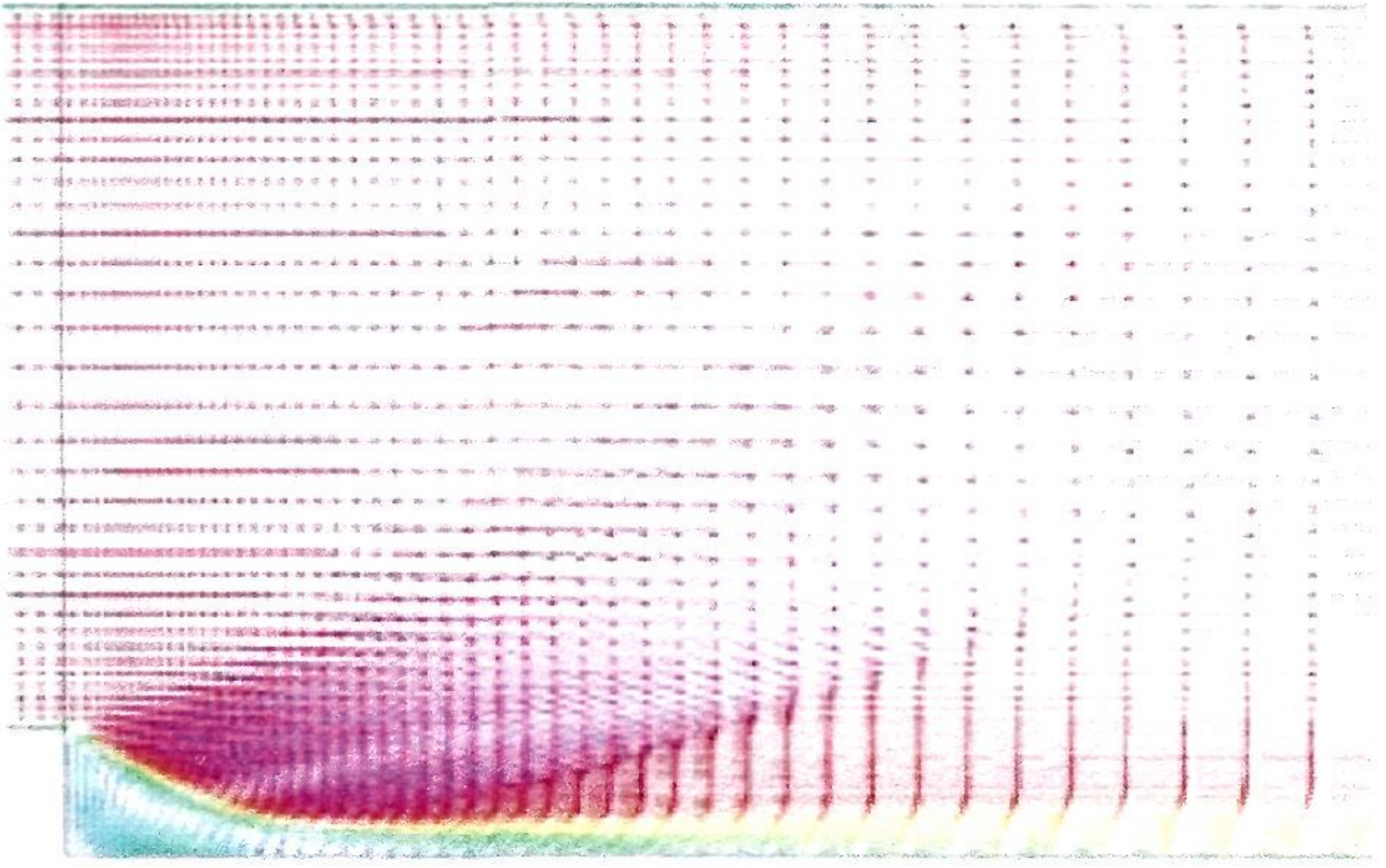

Static pressure P/P$_{fs}$
1.2
0.8
0.4
0.0
0
4
8
12
16
20
24
Axial distance, X/h
ER=2.0
1.5
1.33
1.25
1.2
1.18
1.0


Without injection/ With injection
H/h=3.0
H/h=5.0
H/h=6.65
H/h=3.0
H/h=5.0
H/h=6.65
Static pressure, P/Pfs
Axial distance from the step, X/h
0.0
1.0
2.0
3.0
4.0
0
4
8
12
16
20
24

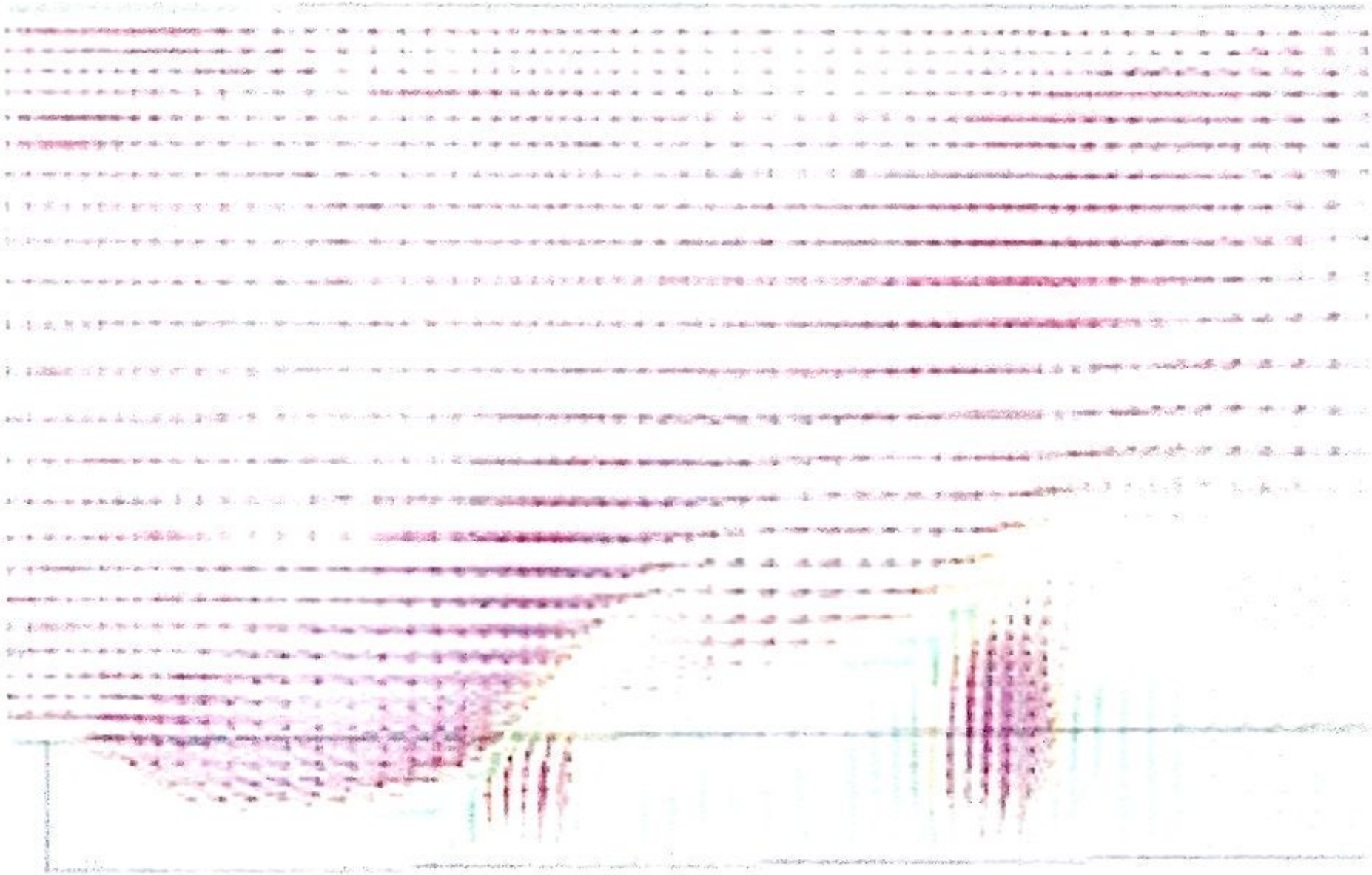

Without injction
With injection
H/h=3.0
H/h=5.0
H/h=6.65
H/h=3.0
H/h=5.0
H/h=6.65
Static pressure, P/Pfs
4.0
3.0
2.0
1.0
0.0
0
4
8
12
16
20
24
Axial distance from the step, X/h


Speed (m/s)
650
500
350
200
100
0
Mach number
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Mach number
Vector plot

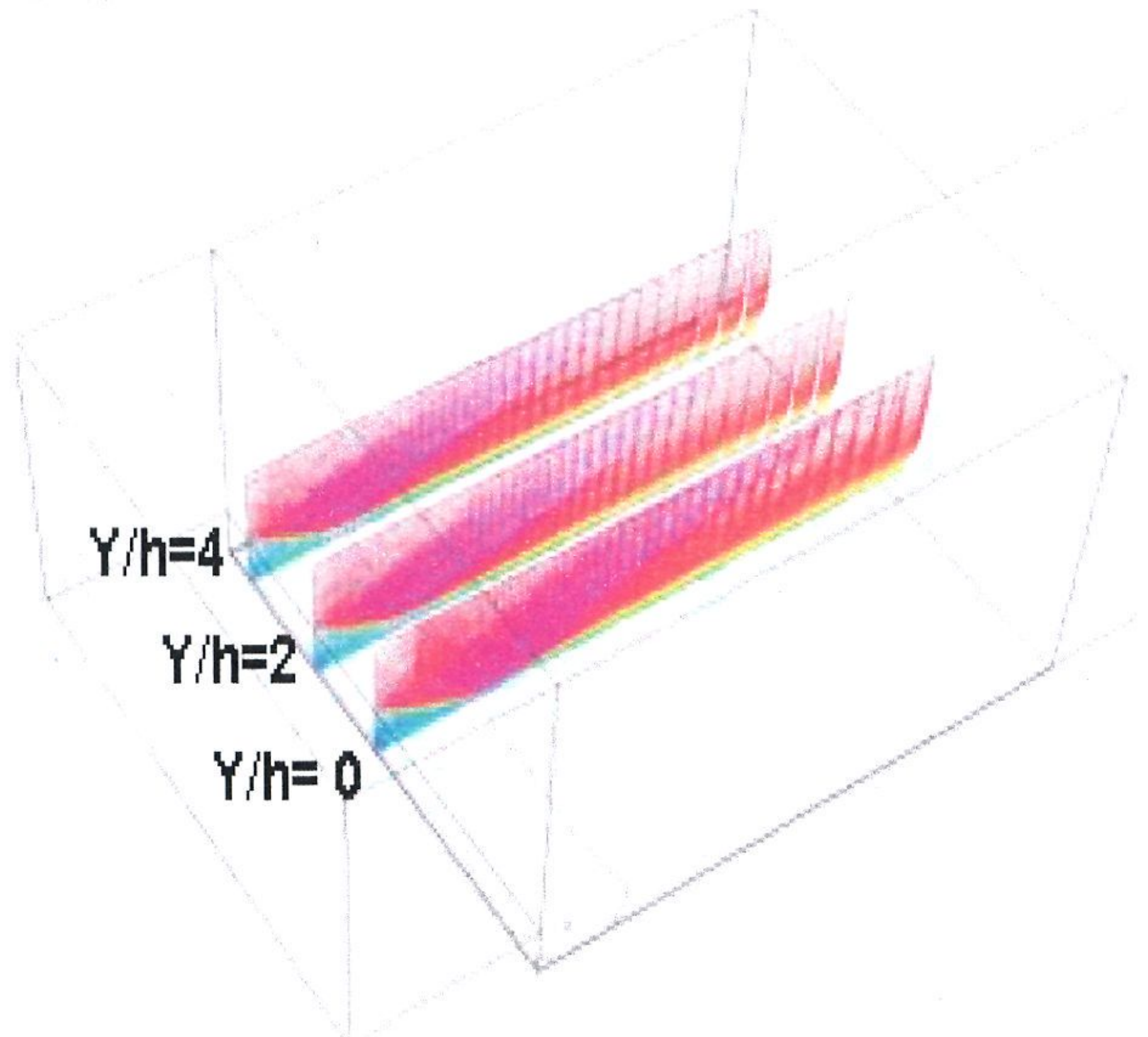

Pressure (Pa)
4.0e4
3.5e4
3.3e4
2.6e4
1.2e4
0.5e4
Speed (m/s)
650
500
350
200
100
0
a) Vector plot
b) Pressure distribution



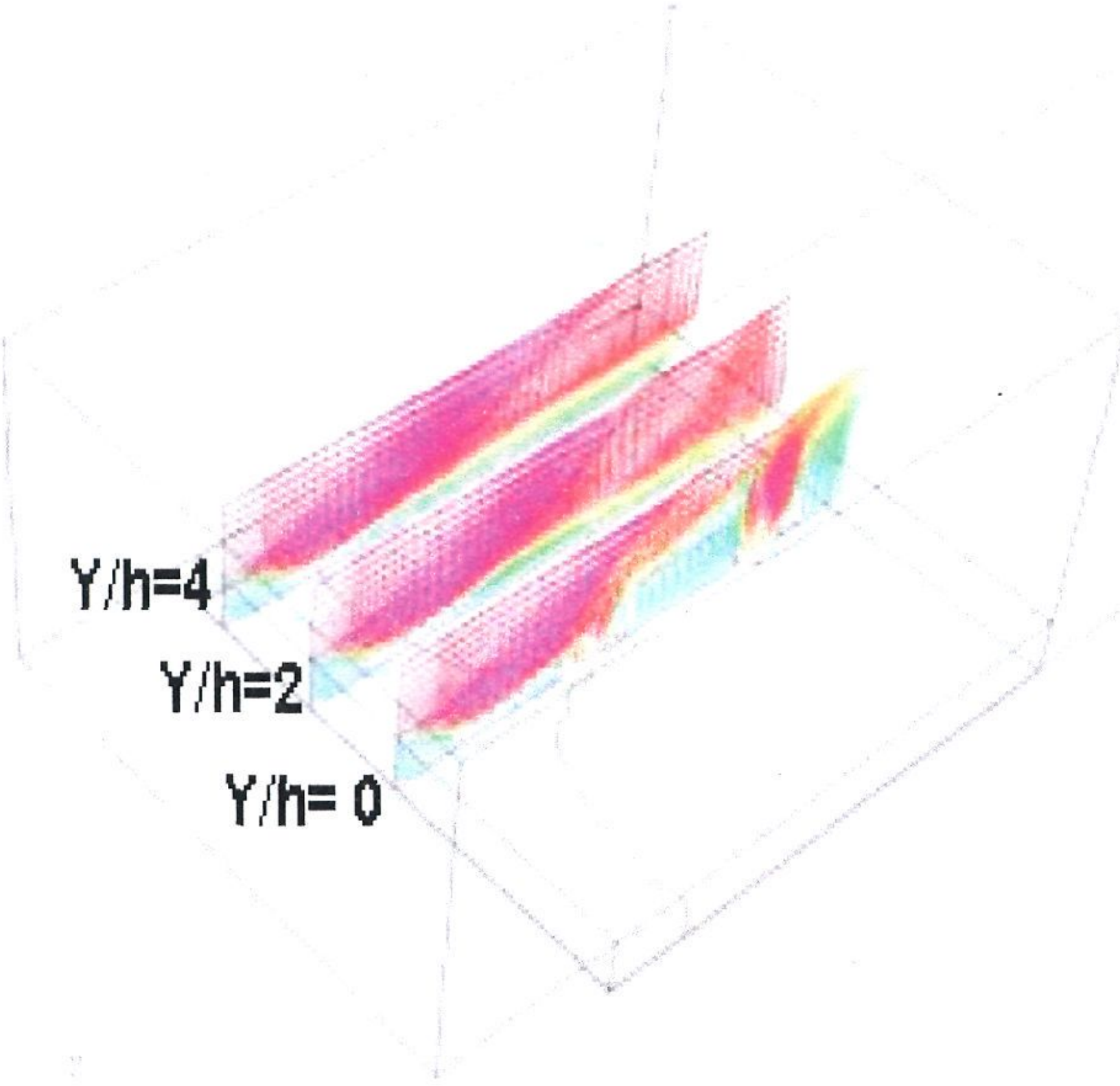
a) Without injection



b) With injection



a) Without injection



b) With injection